# Soo Hyun Park, Ph.D.

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## **EDUCATION**

2007 – 2013	Ph.D. in Neuroscience, Seoul National University, South Korea
	Thesis: Neuroimaging and Psychophysical Studies on Stimulus-
	induced Spatiotemporal Dynamics of Contextual Modulation in Human
	Vision
2003 – 2007	B.A. in Psychology, Seoul National University, South Korea

## RESEARCH EXPERIENCE

10/2013 – present	Postdoctoral Researcher (Research Fellow since 10/2018) Section on Cognitive Neurophysiology and Imaging, Laboratory of Neuropsychology, National Institute of Mental Health, MD, USA
	Advisor: Dr. David Leopold
9/2013 - 11/2014	Postdoctoral Researcher, Dep. of Brain and Cognitive Sciences,
	Seoul National University, South Korea
	Advisor: Dr. Sang-Hun Lee
8/2011 - 11/2011	Visiting student, Dep. of Psychology, Vanderbilt University, TN, USA
	Advisor: Dr. Randolph Blake
3/2007 - 8/2013	Graduate Student, Interdisciplinary Program in Neuroscience,
	Seoul National University, South Korea
	Advisor: Dr. Sang-Hun Lee
3/2005 - 2/2007	Undergraduate Research Assistant, Laboratory of Dr. Sang-Hun Lee,
	Dep. of Psychology, Seoul National University, South Korea

## **PUBLICATIONS** (\*: equal contribution)

<u>Park SH</u>, Koyano KW, Russ BE, McMahon DBT, Waidmann E, Leopold DA (in preparation) Face patch subnetworks revealed by single-unit fMRI mapping.

Leopold DA, <u>Park SH</u> (2020) Studying the visual brain in its natural rhythm. NeuroImage 216: 116790.

<u>Park SH</u>, Russ BE, McMahon DBT, Koyano KW, Berman RA, Leopold DA (2017) Functional subpopulations of neurons in a macaque face patch revealed by single-unit fMRI mapping. Neuron 95: 971–981.

<u>Park SH</u>\*, Cha K\*, Lee S-H (2013) Coaxial anisotropy of cortical point spread in human visual areas. Journal of Neuroscience 33:1143–1156.

# **GRANTS AND FELLOWSHIPS**

12/2014 – 11/2016 Korea Visiting Scientist Training Fellowship (45,455 USD / year)

Korea Health Industry Development Institute

2007 – 2009 Teaching & Learning Scholarship, Seoul National University

# **HONORS & AWARDS**

2020	OFT NIMH IRP Trainee Travel Award (1,000 USD) NIMH IRP Office of Fellowship Training
2018	Best Poster Award (Top 5)
20.0	ISMRM Workshop on Advanced Neuro MR: Best Practices for Technical
	Implementation
2016	Excellent Research Award
	NIH-Korean Scientists Association
2016	OFT NIMH IRP Trainee Travel Award (1,000 USD)
	NIMH IRP Office of Fellowship Training
2005	Fall Semester Independent Study Scholarship
	Center for Teaching & Learning, Seoul National University
2005	Undergraduate Student Research Award (Gold Prize)
	Institute of Psychological Science, Seoul National University
	Project: Recognition and Eye
	(Team project of 2005 Biological Psychology Lab class)
2004	Undergraduate Student Research Award
	Institute of Psychological Science, Seoul National University
	Project: Motion Transparency Related to Direction Difference and
	Oblique Effect
	(Team project of 2004 Experimental Psychology class)

# **ORAL PRESENTATIONS**

2021	Marmoset Neural Recording talk series (Virtual Presentation) Title: Imaging marmoset visual cortex using miniaturized head-mounted microscope
2021	Invited talk at Friday Seminar Series, School of Biological Sciences, Seoul National University, Seoul, South Korea (Virtual Presentation)  Title: Functional architecture of the high-level visual system in nonhuman primates: new insights from a naturalistic vision paradigm
2020	Annual Meeting of the Korean Society for Brain and Neural Sciences, Seoul, South Korea (Virtual Meeting due to COVID-19 pandemic)  Invited talk in Symposium "Naturalistic Neuroscience: Towards Understanding Brain Mechanisms in Natural Environments"  Title: Neural responses to naturalistic videos in primate visual system

2020	Invited talk at NIMH Fellows Afternoon Neuroscience Seminar series Title: fMRI mapping of neuronal responses to naturalistic videos reveals mixed functional networks within primate face patches
2019	Annual Meeting of the Society for Neuroscience, Chicago, IL, USA <b>Talk in Minisymposium</b> "Naturalistic Paradigms in Awake Monkeys: Bridging fMRI and Extra-Cellular Activities" <i>Title: fMRI mapping of neural responses to naturalistic videos reveals enmeshed functional networks within primate face patches</i>
2017	Invited talk at Special Lecture Series, Department of Brain & Cognitive Sciences, Seoul National University, Seoul, South Korea Title: Functional subpopulations of neurons in a macaque face patch revealed by single-unit fMRI mapping
2016	8 <sup>th</sup> NIH-Annual Bioscience and Engineering Symposium, North Bethesda, MD, USA  Title: Functional subpopulations of neurons in a macaque face patch revealed by single-unit fMRI mapping
2011	Asia-Pacific Conference on Vision, Hong Kong, China Title: Anisotropic spread of cortical activity in human visual cortex
2007	Annual Meeting of the Vision Sciences Society, Sarasota, FL, USA Title: Feature-specific modulation of gamma oscillations in visual detection

## **POSTER PRESENTATIONS**

2018	Annual Meeting of the Society for Neuroscience, San Diego, CA, USA
	"Whole-brain fMRI analysis of face-selective neurons in cortex and thalamus"

- 2018 ISMRM Workshop on Advanced Neuro MR: Best Practices for Technical Implementation, Seoul, South Korea (Selected for Top 5 posters)

  "Using whole-brain activity to investigate single neurons in the face processing system"
- 2017 40<sup>th</sup> Annual Meeting of the Japan Neuroscience Society, Chiba, Japan *"Functional subpopulations of neurons in a macaque face patch revealed by single-unit fMRI mapping"*
- 2016 Gordon Research Conference: Neurobiology of Cognition, Newry, ME, USA "Functional subpopulations of neurons in a macaque face patch revealed by single-unit fMRI mapping"
- 2015 Annual Meeting of the Society for Neuroscience, Chicago, IL, USA
  Godlove et al. "Diverse functional MRI maps derived from the spontaneous activity of
  multiple neurons recorded simultaneously within a single voxel"
- 2015 Annual Meeting of the Society for Neuroscience, Chicago, IL, USA

"Functional MRI mapping based on responses of face-selective neurons during free viewing of natural videos"

- 2014 Annual Meeting of the Society for Neuroscience, Washington, DC, USA *"Functional MRI mapping of IT single unit responses during natural vision"*
- 2012 Asia-Pacific Conference on Vision, Incheon, South Korea "Center/surround motion interactions measured using a nulling procedure"
- 2010 Cognitive Neuroscience Conference in Korea, Seoul, South Korea "Anisotropic spread of cortical activity in human visual cortex"
- 2007 Summer Conference of Korean Society for Cognitive and Biological Psychology, Gwangju, South Korea "Gamma-frequency feature-specific modulation in visual detection: a psychophysical study"
- 2005 Annual Meeting of the Society for Neuroscience, Washington, DC, USA "Psychophysical evidence for oscillating waves of excitability: analysis of response times"

#### **TEACHING & MENTORING EXPERIENCE**

2016 – present	Mentoring post-baccalaureate fellows at NIMH (conducting research together daily, teaching scientific presentations)
2018 – present	Stephany Nti (applying for Pharmacy & Optometry schools)
2016 – 2018	Madeline Marcelle (MD/PhD program at Georgetown Univ.)
2007 – 2009	Psychology: Understanding of Human Mind
	(TA, undergraduate course)
2007	Introduction to Psychology (TA, undergraduate course)
2007 Fall	Cognitive Neuroscience (TA, graduate course)
2007 Spring	Advanced Vision Science (TA, graduate course)

#### **SERVICE & OUTREACH**

2021 – present	NIMH Fellows Committee
2019	Judge, NIH Postbac Poster Day
2005 – 2008	Organizer, Lab Journal Club, Seoul National University, South Korea

Updated May 11, 2021